second through-apertures are, in turn, variably alignable such that fluid may flow through the at least two first through-apertures only when there is an overlap between first and second through-apertures; and

wherein variable alignment of the first and second disk members is brought about by relative rotation thereof;

whereby the flow rate and temperature of the fluid exiting the valve may be varied by variable coaxial alignment of the first and second through-apertures.

REMARKS

Reconsideration of this Application is respectfully requested. Claim 9 has been cancelled without prejudice. Claims 1, 7, 8, 11-19, and 21-28 have been amended. New Claims 33-34 have been added.

Claims 1-14 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Saether. The Examiner states that Saether discloses a mixing valve having first and second disk members 16 and 17 which are arranged in sealing contact and are variably aligned to vary the flow of fluid therethrough by an electric motor 41.

Claims 15-28 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Saether. The Examiner states that Saether discloses the claimed invention except for the two valve subunits. The Examiner concludes that the recitation of two valve subunits is considered to be a mere recitation of duplicate parts which is not considered to be patentable in itself, especially since Saether discloses all of the other claimed elements.

The Examiner also states that there is insufficient antecedent basis for the following: "the at least one electric motor" in line 2 of Claim 16; "the at least one electric motor" in line 2 of Claim 18; "the controller" in line 1 of Claim 19; "the at least one sensor" and "the at least one parameter" in lines 3 and 4 of Claim 21; "the at least one given parameter" in lines 1 and 2 of Claim 22; "the controller" in line 2 of Claim 23; "the one or more manifold outlets" in lines 1 and 2 of Claim 25; and "the at least one parameter" in line 2 of Claim 26.

The Examiner further states that the prior art made of record and not relied upon is considered pertinent to Applicants' disclosure.

Insofar as the rejections may be applied to the Claims as amended herein, which Applicants submit that they should not be so applied, the rejections are traversed for the reasons set forth below.

Applicants respectfully disagree that there is insufficient antecedent basis for "the at least one electric motor" in line 2 of Claim 18. Claim 18 depends from Claim 15, and "at least one electric motor" appears in line 9 of Claim 15 as originally filed.

Applicants respectfully submit that the above amendments cure the instances of insufficient antecedent basis discussed above.

The word "aperture" has been replaced with the word "through-aperture" throughout the Claims, as understood from the Specification, Drawings, and originally filed Claims, in order to highlight the feature of the present invention which includes operative apertures in the first and second disk members that extend through the disks, as opposed to, for example, known indentations or recesses on the bottom surface of the second disk which serve as paths to redirect water flow. For example, Figure 3 of the present Application shows a preferred embodiment of a second disk or output valve member 10 having a cut-out section or removed sector 12 through which water may pass, hereinabove referred to as an "open-ended cut-out section". As another example, Figure 5 of the present Application shows one preferred embodiment of a first disk or inlet valve member having two removed sectors through which water may pass, hereinabove referred to as an "enclosed interior opening ". As shown in Figures 3 and 5, embodiments of the present invention may include sectorially shaped through-apertures, either having either open or closed ends (or arcs).

The present invention provides a mixing valve which permits adjustment of the flow rate and mix via relative rotation between the first and second disk members. In a preferred embodiment, the mixed fluid characteristic of interest is the temperature, and both the flow rate and temperature of the mixed outlet fluid can be adjusted by relative rotation between the first and second disk members. In a preferred embodiment, the rotation is effected by an electric motor. In particular, the

present invention does not require linear motion within the valve to effect either flow rate or temperature control.

In contrast, Saether discloses a mixing valve which includes a fixed valve disk 16 cooperating with a moveable valve disk 17 to control the flow and temperature of water. The moveable valve disk 17 has a recess 18 which permits connection between the inlets 7 and 11 and the oulet 12. See Saether, column 2, lines 13-22. Moreover, the moveable disk of Saether moves rotationally under the control of a motor and linearly or rectilinearly under the manual control of a handle, as described in Saether, Column 2, lines 55-66.:

> Relative motion between the eccentric stud 25 of the turning handle 6, the crank-shaped part or portion 27 and the carrier 32 causes the movable valve disc 17 to move linearly up or down with respect to the fixed valve disc 16 (as viewed in to FIG. 3) when the turning handle 6 is turned in or one or the other directions from the positions shown in FIGS. 3 and 6.
>
> The just described motion of the turning handle, the crank portion, the carrier and the valve disc 17 serves to control the amount of water flowing through the device.

Therefore, Applicants respectfully submit that Saether neither teaches nor suggests the presently claimed invention, and none of the cited references, whether taken alone or in some combination, show, describe, teach, or even suggest a valve having the features of the present invention.

In summary, all of the above-noted rejections are believed to be overcome by the above and foregoing. The Examiner is therefore asked to reconsider the outstanding rejections as they may be considered to apply to these amended claims, and to withdraw the same preliminary to the allowance hereof.

In view of the above and foregoing, reconsideration and withdrawal of the outstanding grounds of rejection and early allowance of the Claims as amended are believed to be in order and are courteously solicited. If necessary, the Examiner is urged to draw further fees properly chargeable in this case from Deposit Account No. 01-1728.

Respectfully submitted,

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Dated: September 14, 2000